

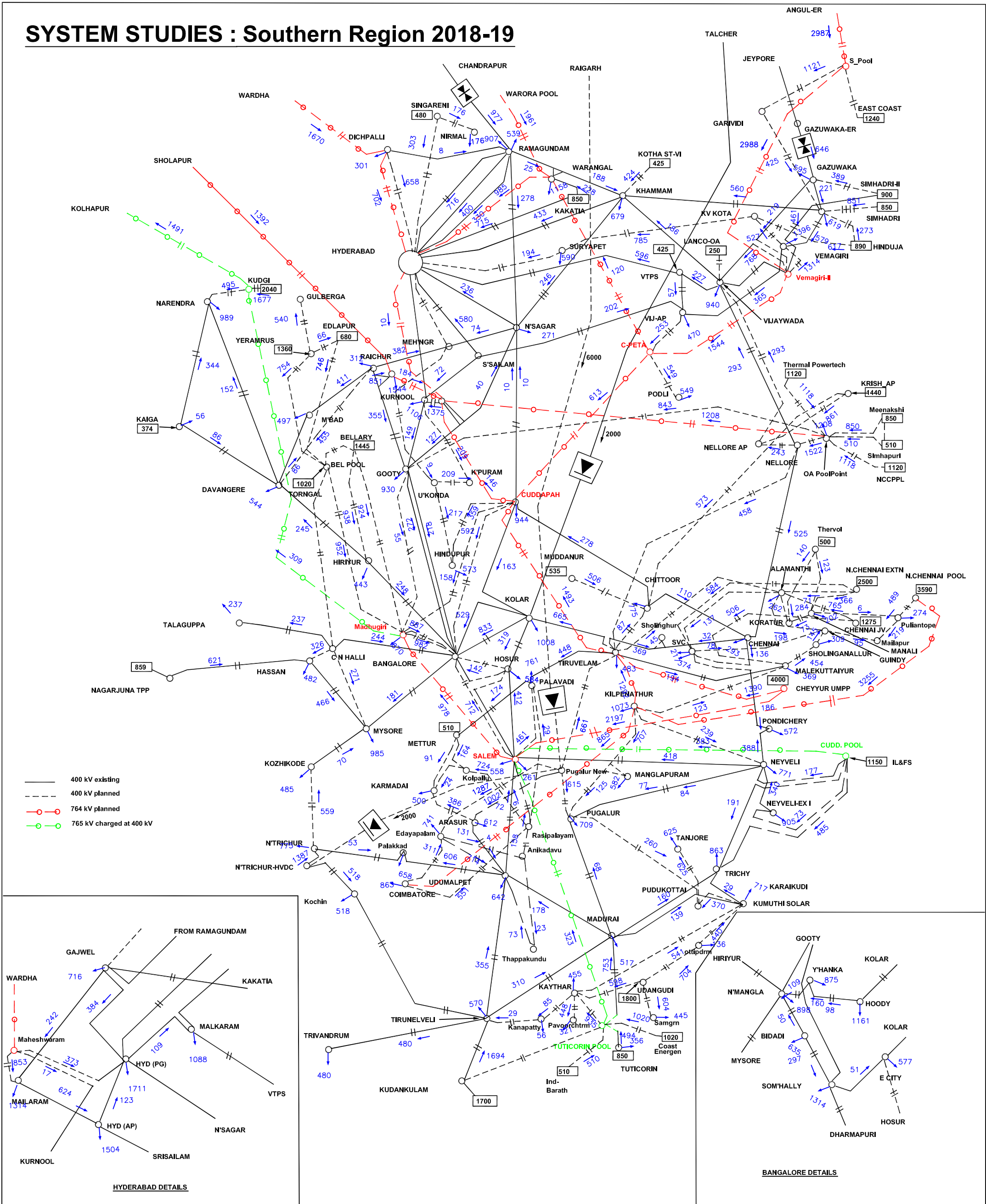
**Annex – 3.0**

**Agenda Item # 3.0**

**“Transmission System for Coastal Tamil Nadu Power Ltd. (4000 MW) Cheyyur UMPP in Kanchipuram of Tamil Nadu”**

<b>1</b>	Studies-Exhibits	6 Pages
<b>2</b>	Cancellation Order	1 Page

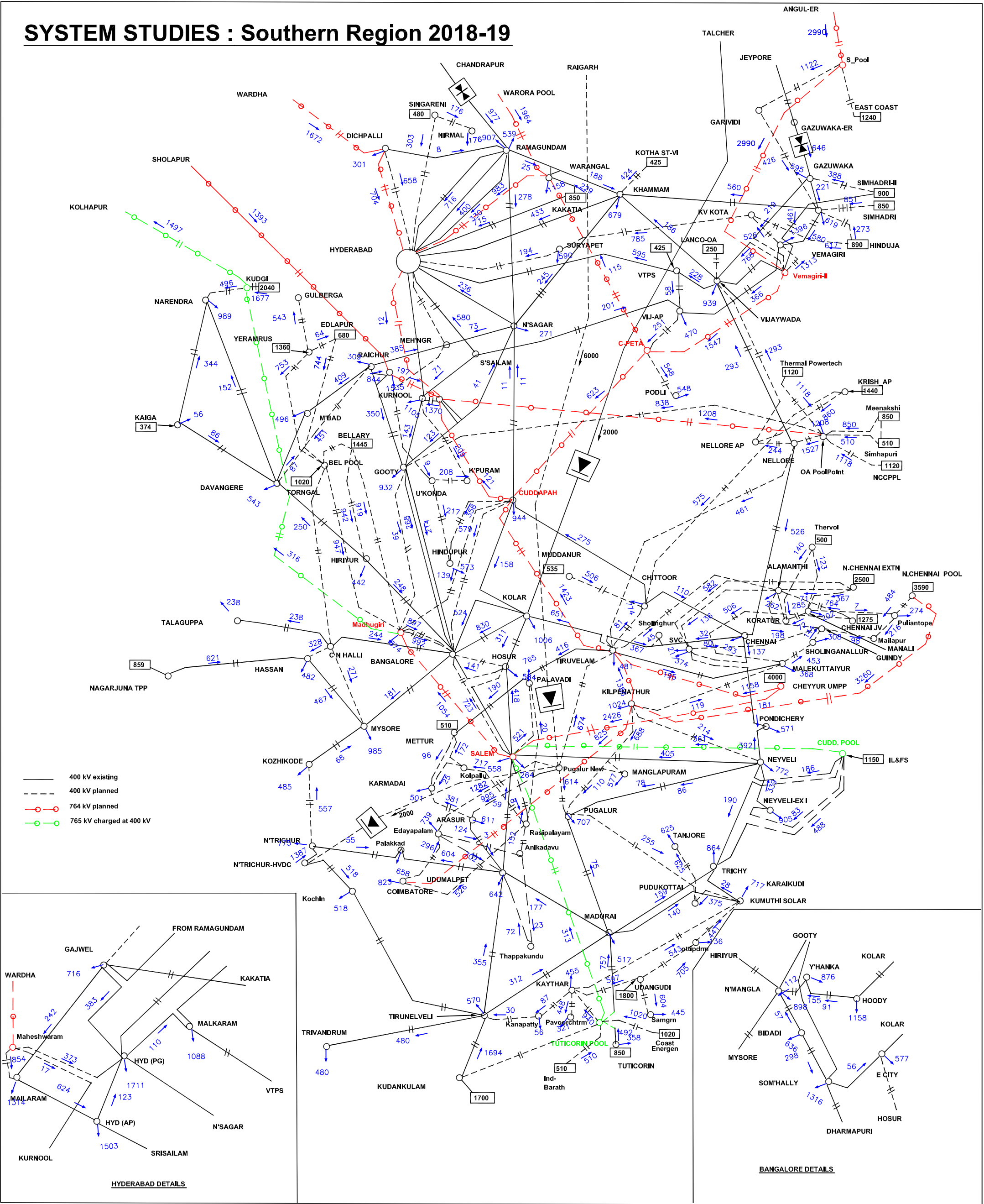
SYSTEM STUDIES : Southern Region 2018-19



HYDERABAD DETAILS

BANGALORE DETAILS

**SYSTEM STUDIES : Southern Region 2018-19**

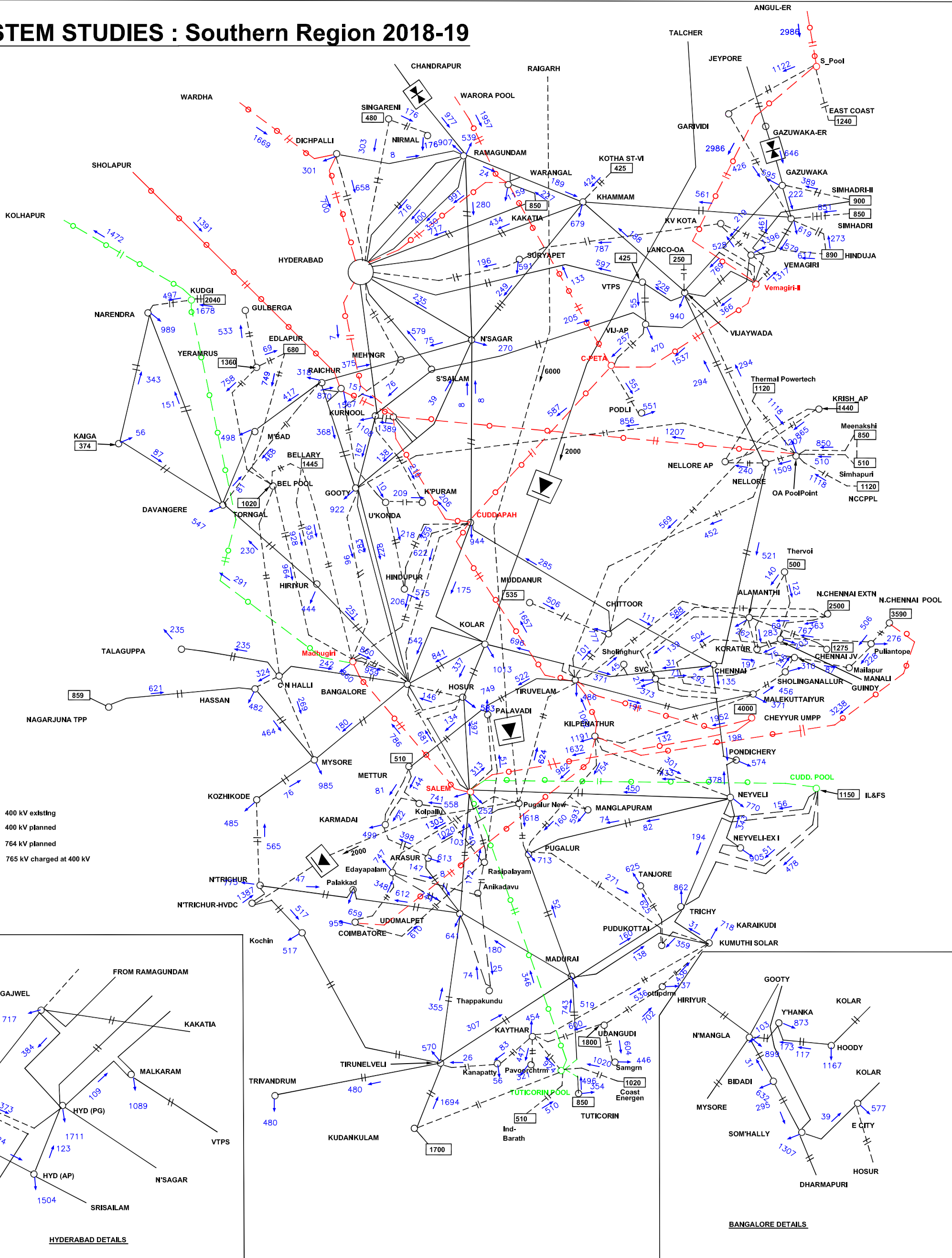


- 400 kV existing
- - - 400 kV planned
- 764 kV planned
- 765 kV charged at 400 kV

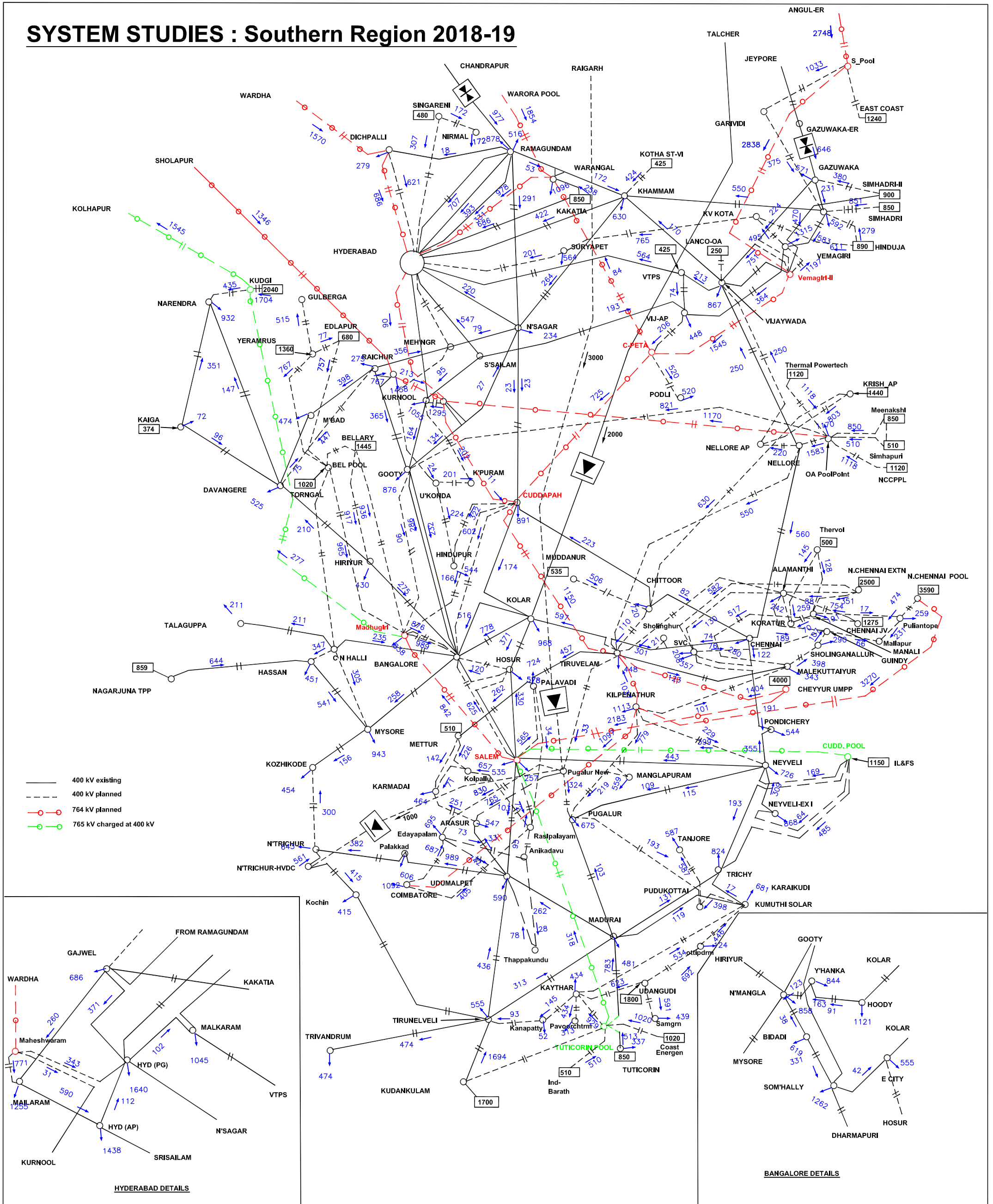
**HYDERABAD DETAILS**

**BANGALORE DETAILS**

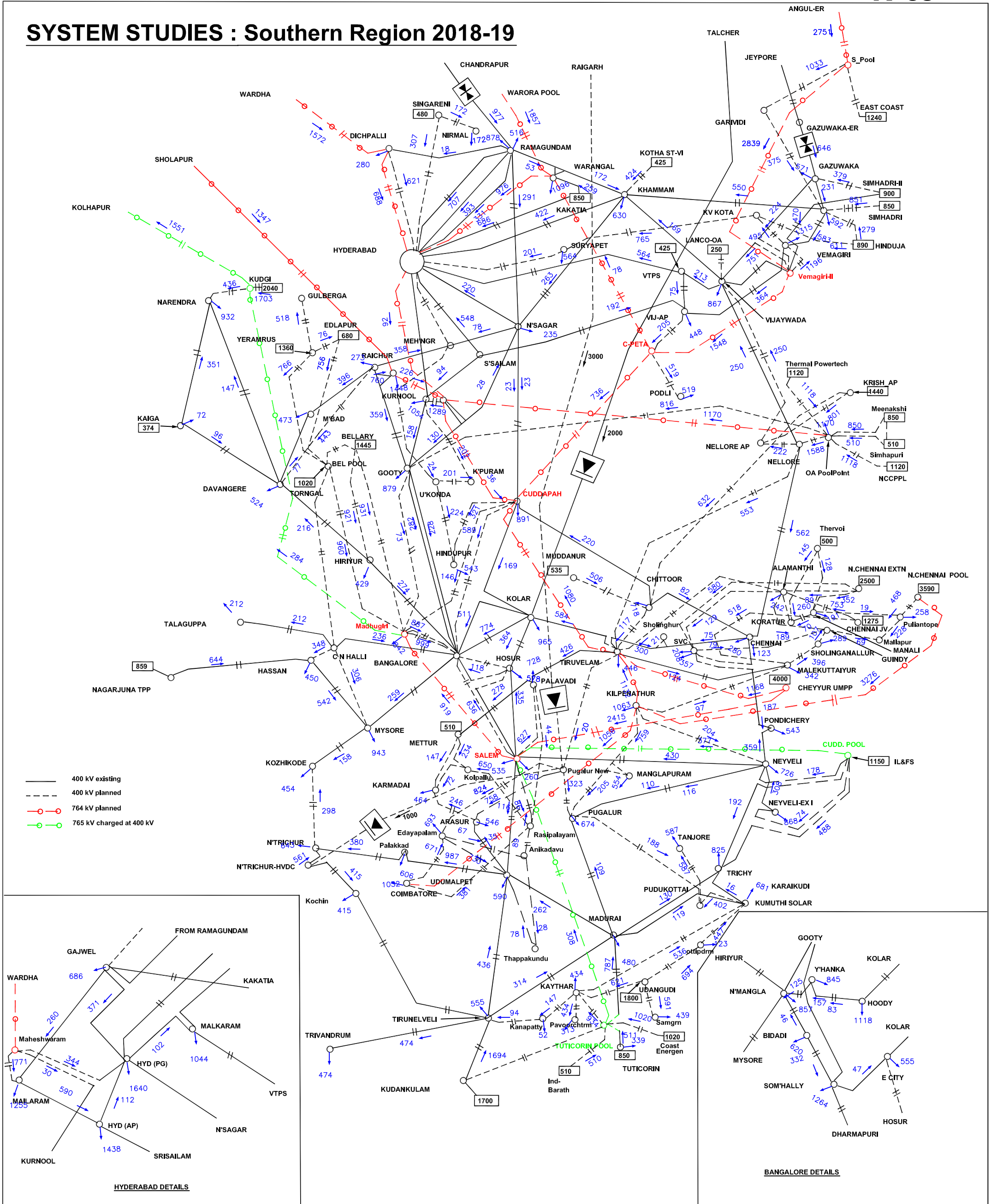
# SYSTEM STUDIES : Southern Region 2018-19



SYSTEM STUDIES : Southern Region 2018-19



SYSTEM STUDIES : Southern Region 2018-19

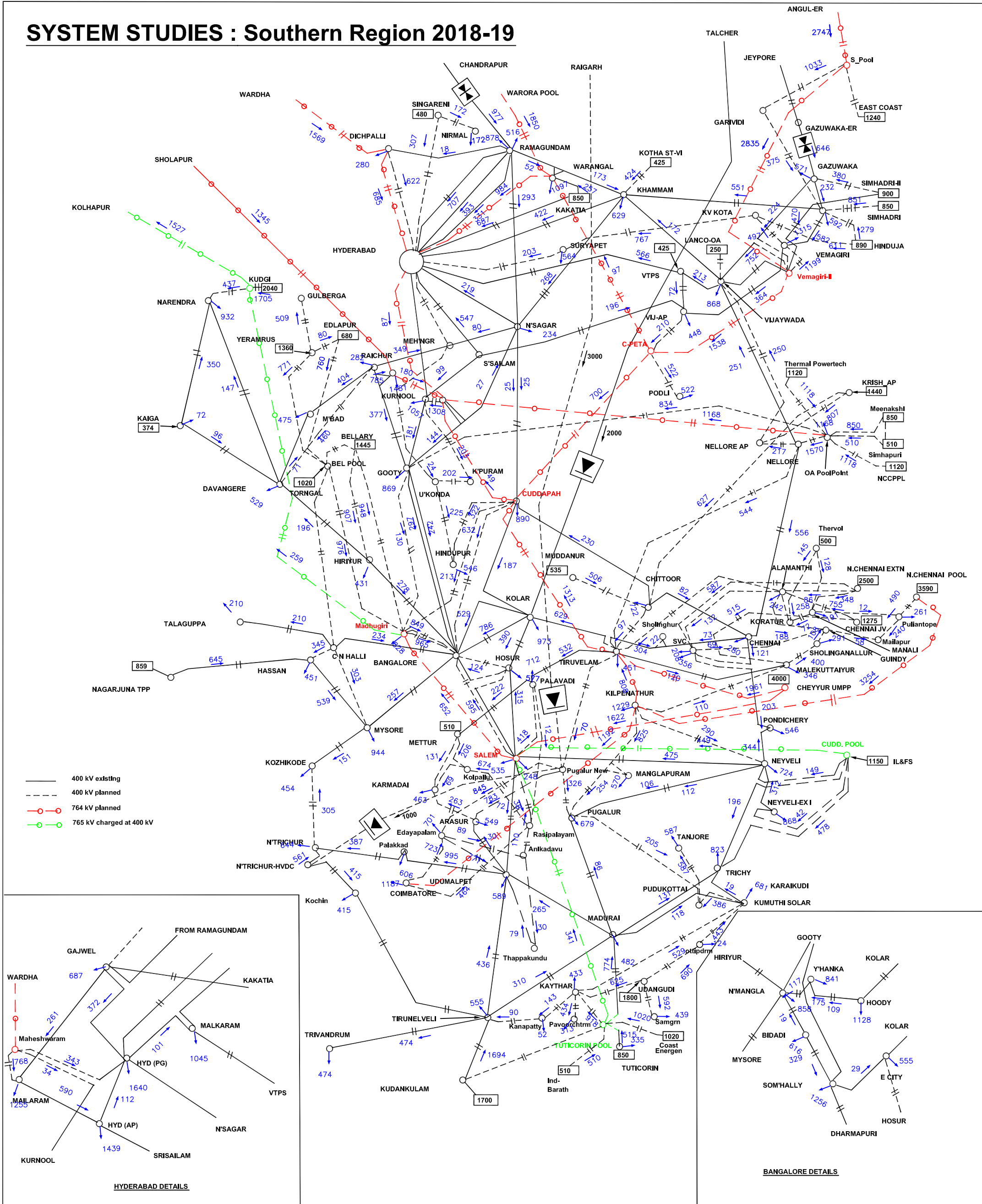


- 400 kV existing
- - - 400 kV planned
- 764 kV planned
- 765 kV charged at 400 kV

HYDERABAD DETAILS

BANGALORE DETAILS

SYSTEM STUDIES : Southern Region 2018-19





No. 12/4/2013-UMPP  
Government of India  
Ministry of Power  
Shram Shakti Bhawan, Rafi Marg,

New Delhi, the 29<sup>th</sup> December, 2014

OFFICE MEMORANDUM

**Sub:- Bidding process for Bedabahal UMPP, Odisha and Cheyyur UMPP, Tamil Nadu.**

The undersigned is directed to refer to CTNPL letter No. 03/UM08/13/RFP dated 23.12.2014 and PFCCL letter No. 03/22/MoC/UMPP/Vol.I dated 24.12.2014 and to convey to PFC, the nodal agency for UMPP, that current bidding process for two UMPPs i.e Bedabahal UMPP, Odisha and Cheyyur UMPP Tamilnadu may be terminated.

2. This has the approval of Hon'ble Minister of State (I/C) for Power, Coal and New & Renewable Energy.

(Anoop Singh Bisht)

Under Secretary to the Govt. of India

Ph:-23766236

CMD, PFC

Copy to:

CEO, PFCCL

Copy for information to:-

PPS to Secretary (P)  
PPS to SS(RNC)  
PPS to JS (Thermal)  
PPS to Dir (UMPP)

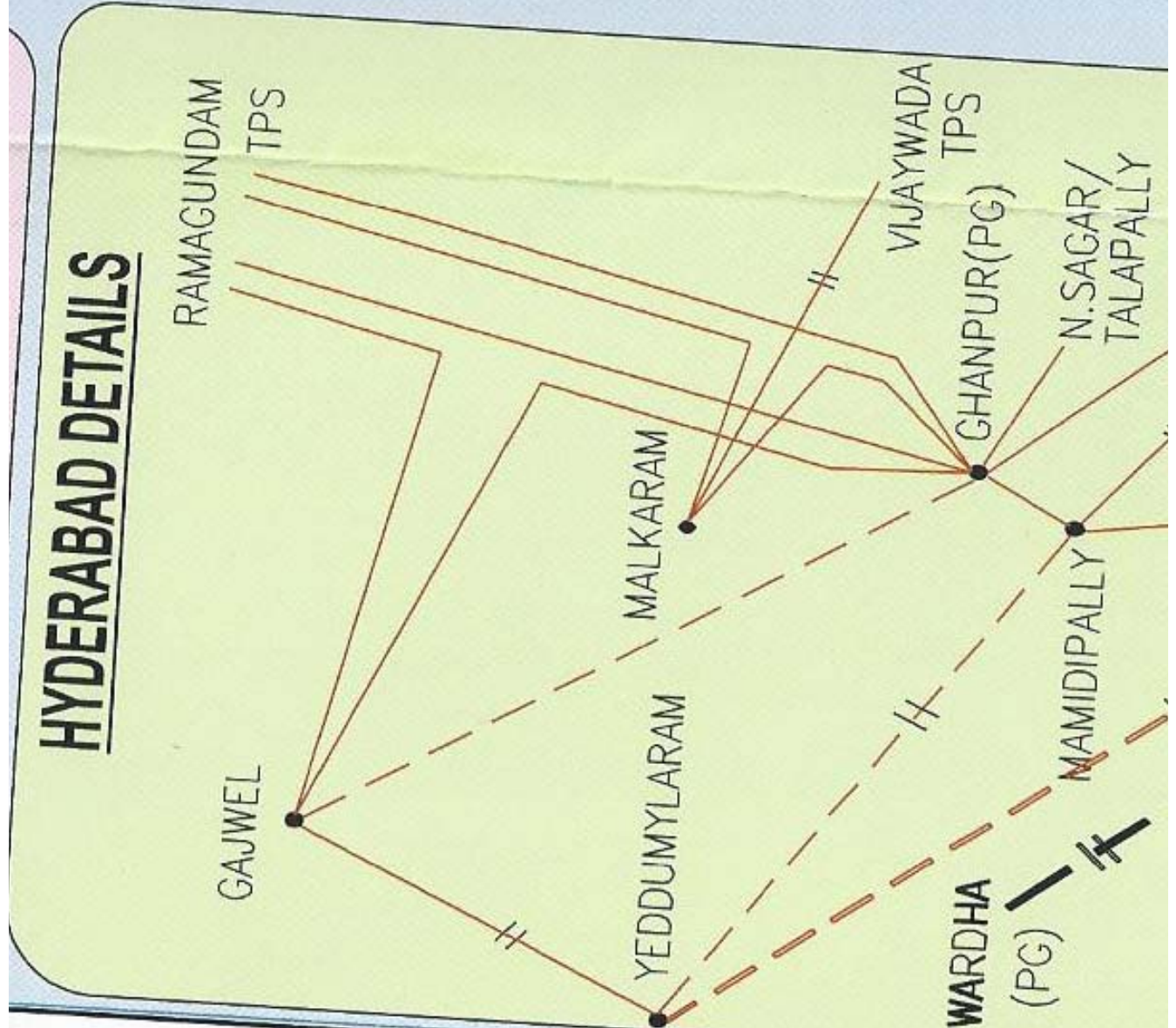
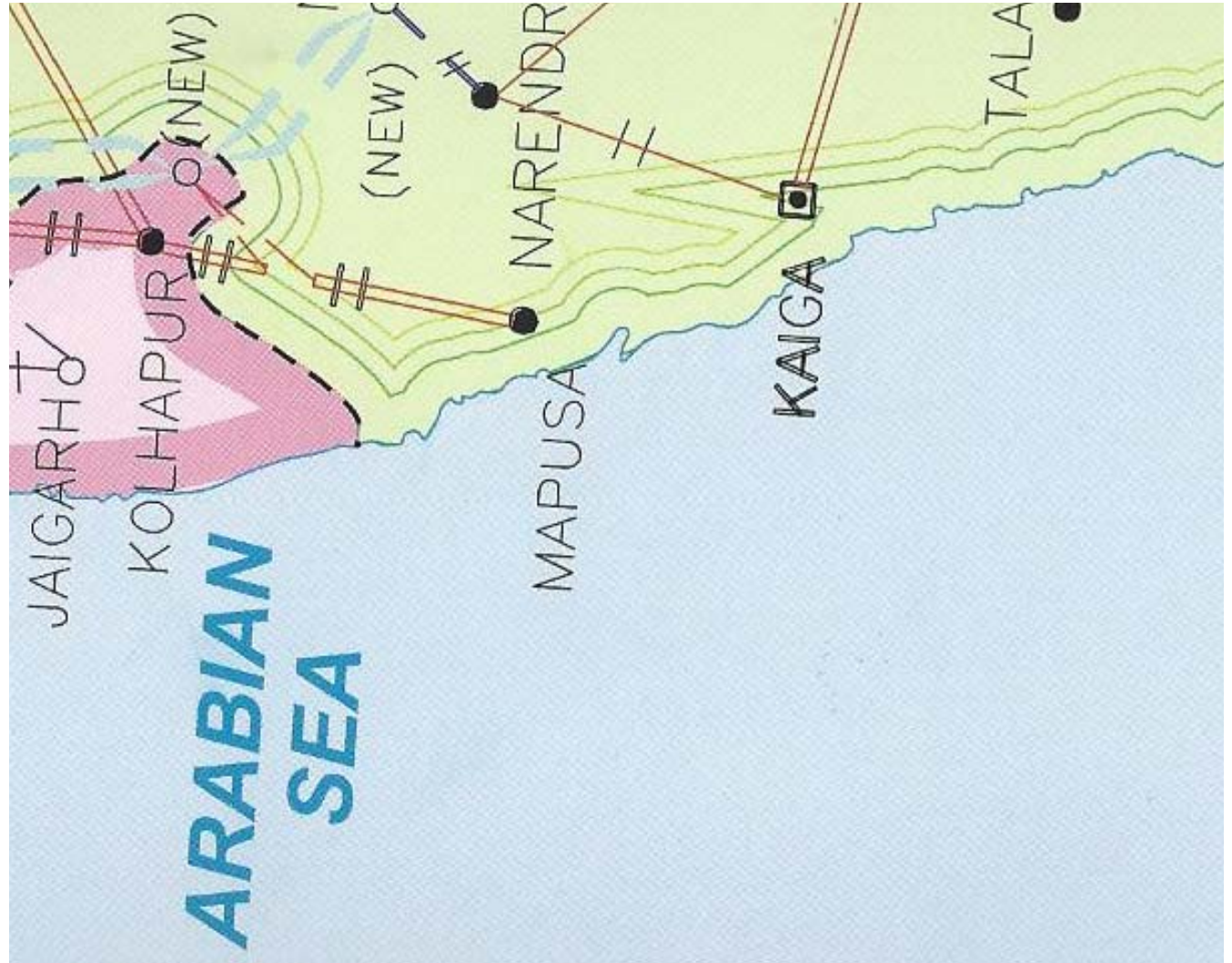
(Anoop Singh Bisht)  
Under Secretary to the Govt. of India



**Agenda Item # 4.0**

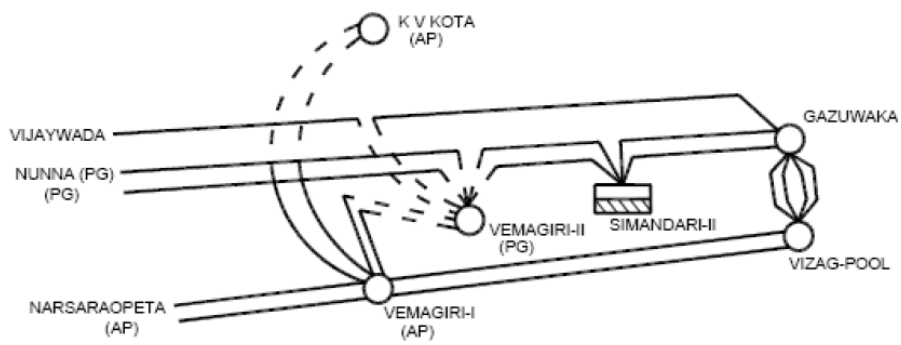
**“Converting Fixed Line Reactors into Switchable Line Reactors in Over Compensated lines”**

<b>1</b>	SLD	1 Page
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**Agenda Item # 5.0**

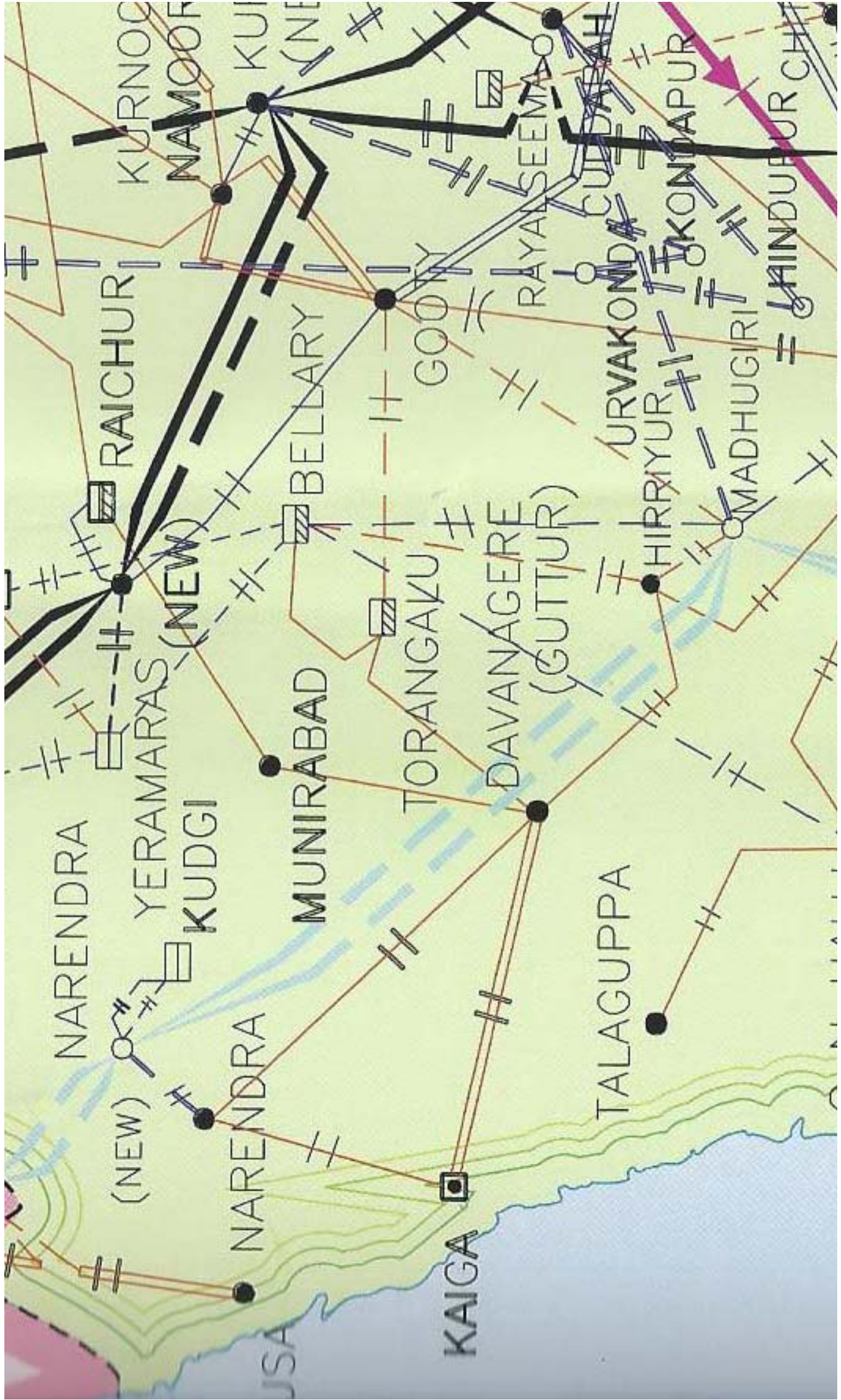
**Reactive compensation at Vemagiri S/S**



**Agenda Item # 6.0**

**“Termination of Narendra-Madhugiri line under TBCB”**

<b>1</b>	SLD	1 Page
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**Annex – 7.0**

**Agenda Item # 7.0**

**“Charging for Kurnool - Thiruvalem 765kV D/c at 400kV”**

<b>1</b>	In-principle Approval	2 Pages
<b>2</b>	PGCIL letter No C/CTU/N/PLG dated 30.01.2015	1 Page



भारत सरकार/ Government of India  
विद्युत मंत्रालय / Ministry of Power  
केंद्रीय विद्युत प्राधिकरण/ Central Electricity Authority  
प्रणाली योजना एवं परियोजना मूल्यांकन प्रभाग  
System Planning & Project Appraisal Division  
सेवा भवन, आर.के. पुरम, नई दिल्ली - 110066  
Sewa Bhawan, R.K. Puram, New Delhi – 110066



[ISO : 9001 : 2008]

No : 51/4/(37<sup>th</sup>)/SP&PA-2014/1947-52

Dated: 29-10-2014

**To**

Shri Y.K.Sehgal,  
COO (CTU-Planning),  
PGCIL,  
Saudamini, Plot No 2, Sector29,  
Gurgaon.

**Sub:** Charging of Kurnool- Thiruvelam 765kV D/C line at 400kV –reg.

**Ref:** PGCIL letter no C\CTU-Plg\S\CEA\Kurnool-Thir Charging dated 25<sup>th</sup> Sept, 2014.

Sir,

1. This has reference to your letter conveying that the Kurnool- Thiruvelam 765kV D/C line which is under construction by PGCIL cannot be charged at 765kV because of delay in the supply of 240 MVAR reactor at Thiruvelum end. Therefore PGCIL has requested CEA for giving its in principle approval for charging of the Kurnool- Thiruvelam 765kV D/C line at 400kV for 4-5 months.
2. PGCIL has enclosed studies indicating that the Kurnool- Thiruvelam 765kV D/C line charged at 400kV along with Thiruvelum- MTPS Stage III 400kV D/C line leads to enhancement of TTC between NEW Grid-SR Grid by 900 MW and also between S1-S2. This benefit is possible because of the charging of Thiruvelum- MTPS 400kV D/C line by TNEB.
3. In this regard it has been mentioned that SRLDC and PGCIL have concurred a proposal of TNEB for shifting the line reactors from Kaythar end of the Kaythar- Karaikudi 400kV D/C line for installation at Mettur Stage III end of Thiruvelum- MTPS Stage III 400kV D/C line during lean wind season. It may therefore be noted that reinstallation of the reactor at Kayathar end of the Kayathar- Karaikudi line is crucial and must be completed before start of next wind season by TNEB. Otherwise they may not be able to keep in service their Mettur- Thiruvelum line, in which case, the benefit of Kurnool- Thiruvelum line would get reduced.

4. Therefore, it is essential that TNEB must install reactor at Kayathar end by Feb/ March 2015, as agreed in their letter dated 4-9-2014.
5. In view of above, we convey in-principle approval for charging of the Kurnool- Thiruvelam 765kV D/C line of PGCIL at 400kV, for 4-5 months.
6. It is requested that PGCIL may furnish following information
  - (i) Expected date of charging of Kurnool- Thiruvelum line at 400kV.
  - (ii) Expected date of charging of Kurnool- Thiruvelum line at 765kV.

This issues with the approval of Member (Power System), CEA.

Yours faithfully,

-Sd-  
(Pardeep Jindal)  
Director(SP&PA)

Copy to:

1. Member Secretary,  
Southern Regional Power Committee,  
29, Race Course Cross Road,  
Bangalore- 560009
2. Executive Director,  
Southern Regional Load Dispatch Center,  
29, Race Course Cross Road,  
Bangalore- 560009
3. Director(Transmission Projects),  
TANTRANSCO,  
5 B, Block, 1<sup>st</sup> Floor,  
N.P.K.R.R. Maaligai,  
144, Anna Salai,  
Chennai – 600002
4. CEO (POSOCO),,  
B-9, Qutub Institutional Area,  
Katwaria Sarai,  
New Delhi – 110016
5. Director(Distribution),  
TANGEDCO,  
6<sup>th</sup> Floor, Eastern Wing,  
800, Anna Salai,  
Chennai – 600002



# पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

## POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



पावरग्रिड

केन्द्रीय कार्यालय : 'सौदामिनी' प्लॉट सं. 2, सैक्टर-29, गुडगाँव-122 001, हरियाणा

फोन : 2571700 - 719 फैक्स : 2571760, 2571761 तार 'नेटग्रिड'

Corporate office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001 Haryana

Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या /Ref. Number

C/CTU/N/PLG

Date: 30/01/2015

Shri K K Arya,  
Chief Engineer I/c (SP & PA),  
Central Electricity Authority,  
Sewa Bhawan, R K Puram, New Delhi.

### Sub: Charging for Kurnool - Thiruvalem 765kV D/c line at 400kV

Sir,

This is with reference to your letter dated 21/01/2014 on the above mentioned subject. As requested information regarding Kurnool - Thiruvalem 765kV D/c is as follows:

Date of charging of Kurnool - Thiruvalem 765 kV D/c the line at 400kV	27/11/2014
Expected date of charging of Kurnool- Thiruvalem 765 kV D/c line at 765kV	March'2015

Thanking you,

Yours faithfully,

Ashok Pal.

(Ashok Pal)

AGM (CTU-Planning)

Shri PJ  
[Handwritten signature]

## Annex – 8.0

### Agenda Item # 8.0

#### “Synchronization of Nellore –Vijayawada 400kV D/c”

1	PGCIL letter no C\CTU-Plg\S\CEA\Nellore dated 19.1.2015	3 Pages
2	In-principle Approval	3 Pages
3	Vijaywada- Nellore reorientation	2 Pages
4	APTRANSCO letter no Lr.No.CE(IPC&PS)/SE(PS)/DE(SS&LTSS)/F.VTS-NNA/ D.No.27/15 Dt. 16-02-15	2 Pages

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
POWER GRID CORPORATION OF INDIA LIMITED  
(A Government of India Enterprise)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सैक्टर-29, गुडगाँव-122 001, हरियाणा  
फोन : 2571700 - 719 फैक्स : 2571760, 2571761 तार 'नेटग्रिड'  
Corporate office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001 Haryana  
Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या /Ref. Number

C\CTU-Plg\S\CEA\Nellore

Date: 19<sup>th</sup> Jan, 2015

Shri Major Singh  
Member (Power System),  
Central Electricity Authority  
Sewa Shawan, RK Puram  
New Delhi - 110 066.

**Subject: In-principle approval for reorientation of Vijayawada-Nellore 400kV D/c-reg.**

Dear Sir,

As you are aware Vijaywada PG (Nunna)-Nellore-Thiruvalam-Sholinganalur 400kV D/c is being implemented by POWERGRID under System Strengthening in Southern Region-XVIII to enhance power transfer capacity from S1 to S2. The Nellore-Thiruvalam 400kV D/c and Thiruvalam-Sholinganalur 400kV D/c lines have already been commissioned in April'14 and July'14 respectively.

In regard to Vijayawada-Nellore 400kV D/c line, it may be mentioned that most of the works have been completed, however, due to severe ROW constraint, problem is being encountered in termination of the line at Vijayawada PG (Nunna). It is proposed to commission the line by reorientation of one circuit of Vijayawada-IV TPS - Vijayawada-PG (Nunna) 400kV D/c so as to form Vijayawada-IV TPS -Nellore 400kV D/c line with one circuit via Vijayawada PG (Nunna). The proposed reorientation is enclosed at **Exhibit-I**. With the above modified arrangement, the lines would be as below:

Original Arrangement	Proposed Arrangement
<ul style="list-style-type: none"><li>VijayawadaTPS-IV – Vijayawada-PG (Nunna) 400 kV D/c</li><li>Vijayawada-PG (Nunna)- Nellore 400kV D/c</li></ul>	<ul style="list-style-type: none"><li>Vijaywada TPS-IV-Nellore 400 kV D/c with one circuit via Vijaywada-PG (Nunna)</li></ul>

Study has been carried out with original arrangement and with proposed arrangement. It is seen that the power flow is almost identical in both the cases. Regarding reactive power compensation, it is to mention that out of the two 63MVAR line reactors proposed at Vijayawada-PG (Nunna) end of Vijayawada(PG)-Nellore 400kV D/c line, one

पंजीकृत कार्यालय : बी-9, कुतब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 दूरभाष : 26560121 फैक्स : 011-26560039 तार 'नेटग्रिड'  
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 Tel. : 26560121 Fax : 011-26560039 Gram : 'NATGRID'

स्वहित एवं राष्ट्रहित में ऊर्जा बचाएं  
Save Energy for Benefit of Self and Nation

63MVAR line reactor shall be shifted to Vijayawada TPS-IV end for Vijayawada TPS(IV)  
-Nellore 400kV line.

It is hereby requested that In-principle approval for implementation of above reorientation may kindly be given. The same may be informed to the constituents during the forthcoming Standing Committee meeting.

Thanking you,

Yours faithfully,

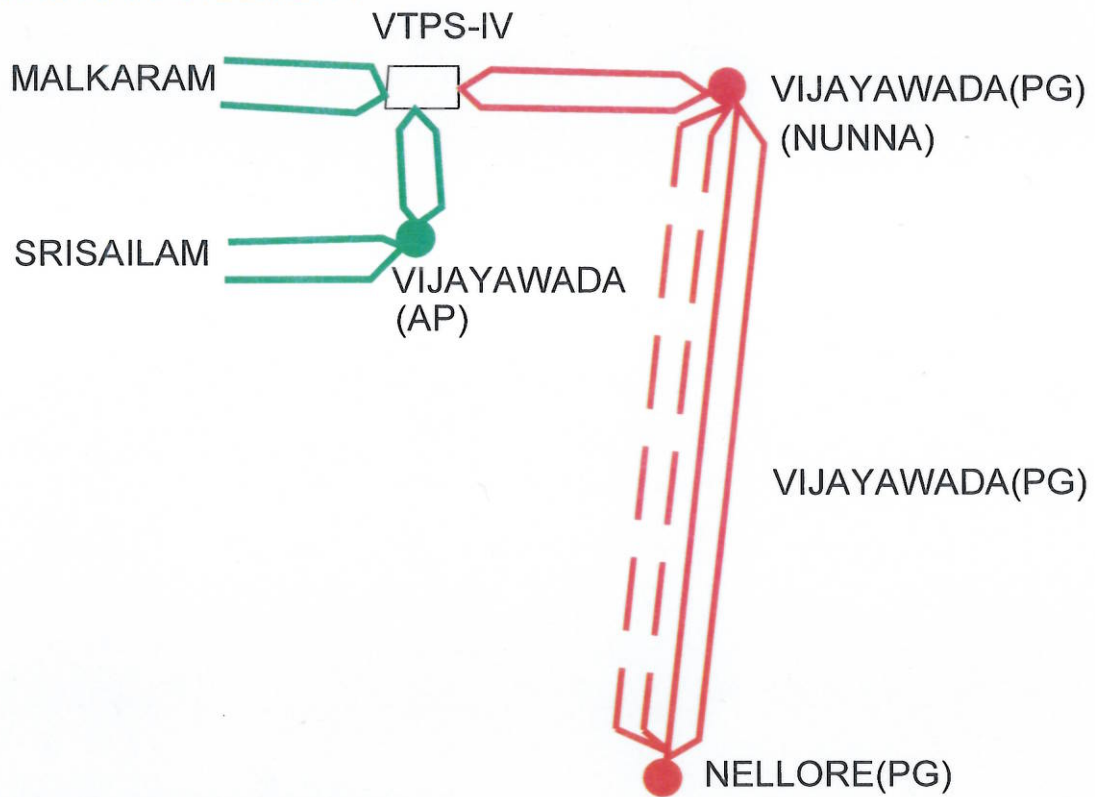
*Seema Gupta*  
19/11/15

**Seema Gupta**

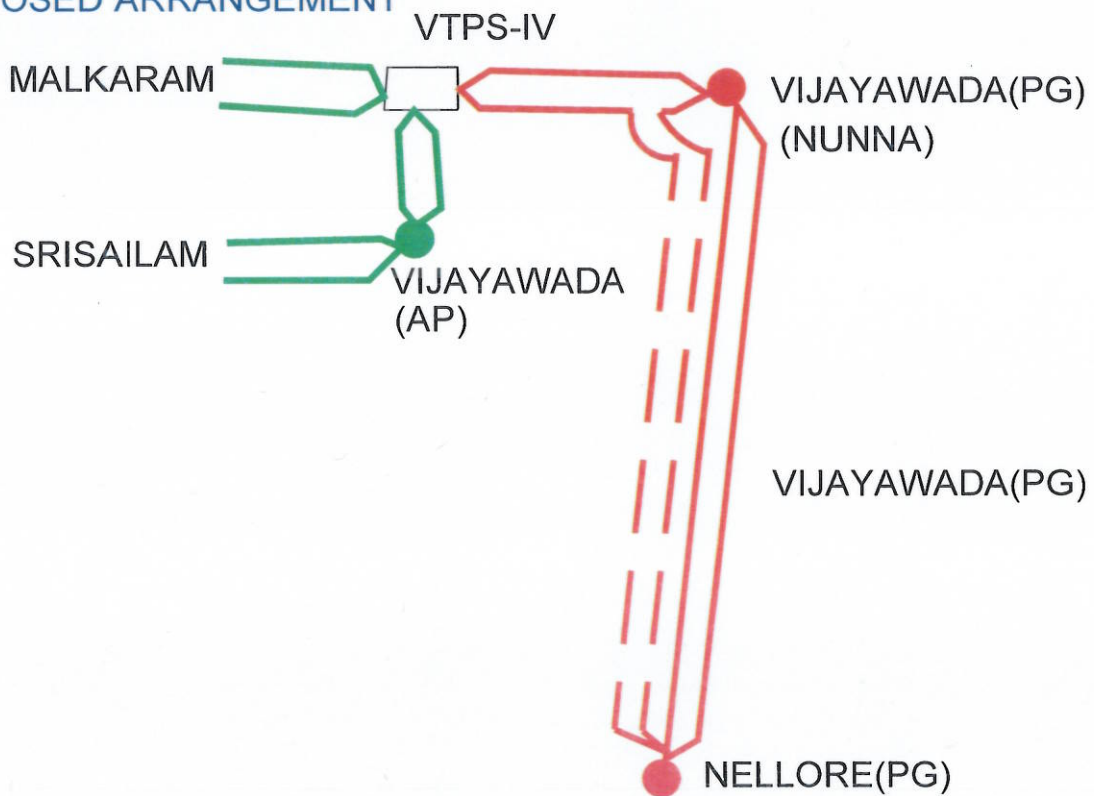
**Chief Operating Officer (CTU-Planning & C.E)**

# PROPOSED REORIENTATION

## ORIGINAL ARRANGEMENT



## PROPOSED ARRANGEMENT





**Government of India**  
**Ministry of Power**  
**Central Electricity Authority**  
**System Planning & Project Appraisal Division**  
**Sewa Bhawan, R. K. Puram, New Delhi-110066**  
**Website: [www.cea.nic.in](http://www.cea.nic.in)**



[ISO: 9001:2008]

No. 51/4/38<sup>th</sup>/SP&PA-2015/202-203

Dated: 27.01.2015

To  
Mrs. Seema Gupta,  
COO(CTU-Plg.) & CE  
Power Grid Corp. of India Ltd.,  
“Saudamini”, Plot No. 2,  
Sector-29, Gurgaon-122001

Subject: Reorientation of Vijaywada – Nellore 400 kV DC line- regarding

Ref: C/CTU-PLG/S/CEA/Nellore dated 19.01.2015

Madam,

1. This has reference to your letter dated 19.01.2015 conveying that work at Vijaywada – Nellore 400 kV DC line is being held up due to severe RoW constraints at Vijaywada PG (Nunna) end.
2. PGCIL has proposed to commission the line by reorientation of one circuit of Vijaywada–IV TPS - Vijaywada PG (Nunna) 400 kV D/C line so as to form Vijaywada-IV TPS – Nellore 400 kV DC line with one circuit via Vijaywada PG (Nunna). PGCIL has also proposed that out of the two 63 MVAR line reactors proposed at Vijaywada PG (Nunna) end of the Vijaywada PG – Nellore 400 kV DC line, one of the 63 MVAR reactors would be shifted to Vijaywada TPS-IV end of Vijaywada-IV TPS- Nellore 400 kV line. PGCIL has requested that in-principle approval for reorientation of the said line may be given.

3. With the above modified arrangements, the lines would be as follows:

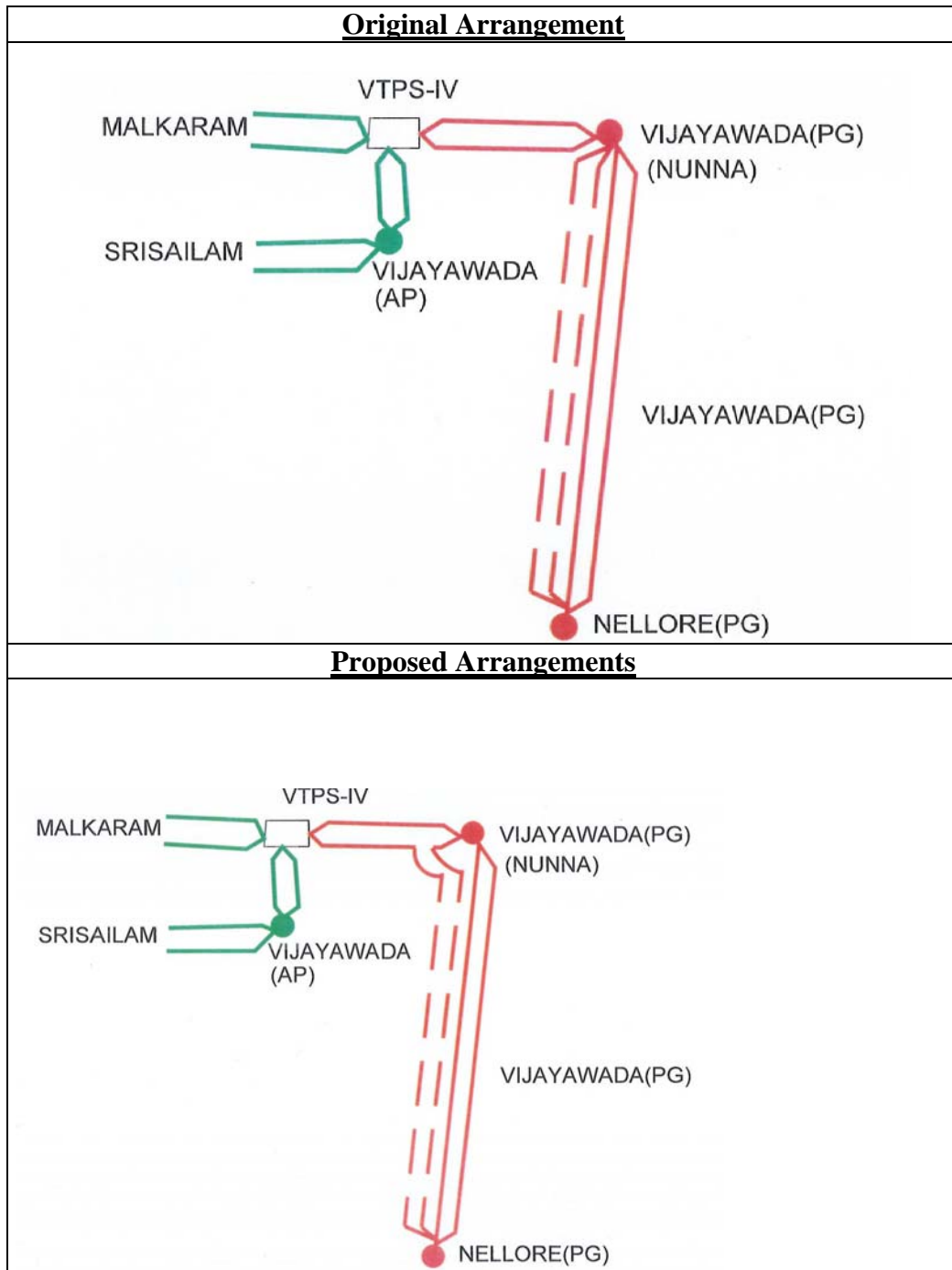
**Original arrangements**

- Vijaywada TPS IV- Vijaywada PG (Nunna) 400 kV DC line.
- Vijaywada PG (Nunna)- Nellore 400 kV DC line

**Proposed arrangements**

- Vijaywada TPS – IV – Nellore 400 kV DC with one circuit via Vijaywada PG (Nunna)

The original and the proposed arrangements are depicted below:



4. The above proposal has been studied and our comments are given below:
- From the studies submitted by PGCIL for the two scenarios( the original and the proposed arrangement), it appears that there is practically not much difference in the flows in this section of the grid.
  - PGCIL may submit whether the proposed arrangements are temporary or permanent.

- iii. PGCIL may be requested to seek u/S 68 approvals as per the new connectivities.
5. The timely completion of this line would be helpful for the Southern Region grid. However, as the Vijaywada TPS- IV – Vijaywada PG (Nunna) line and the Vijaywada TPS- IV switchyard belong to APTRANSCO/ APGENCO, we need to seek their views.

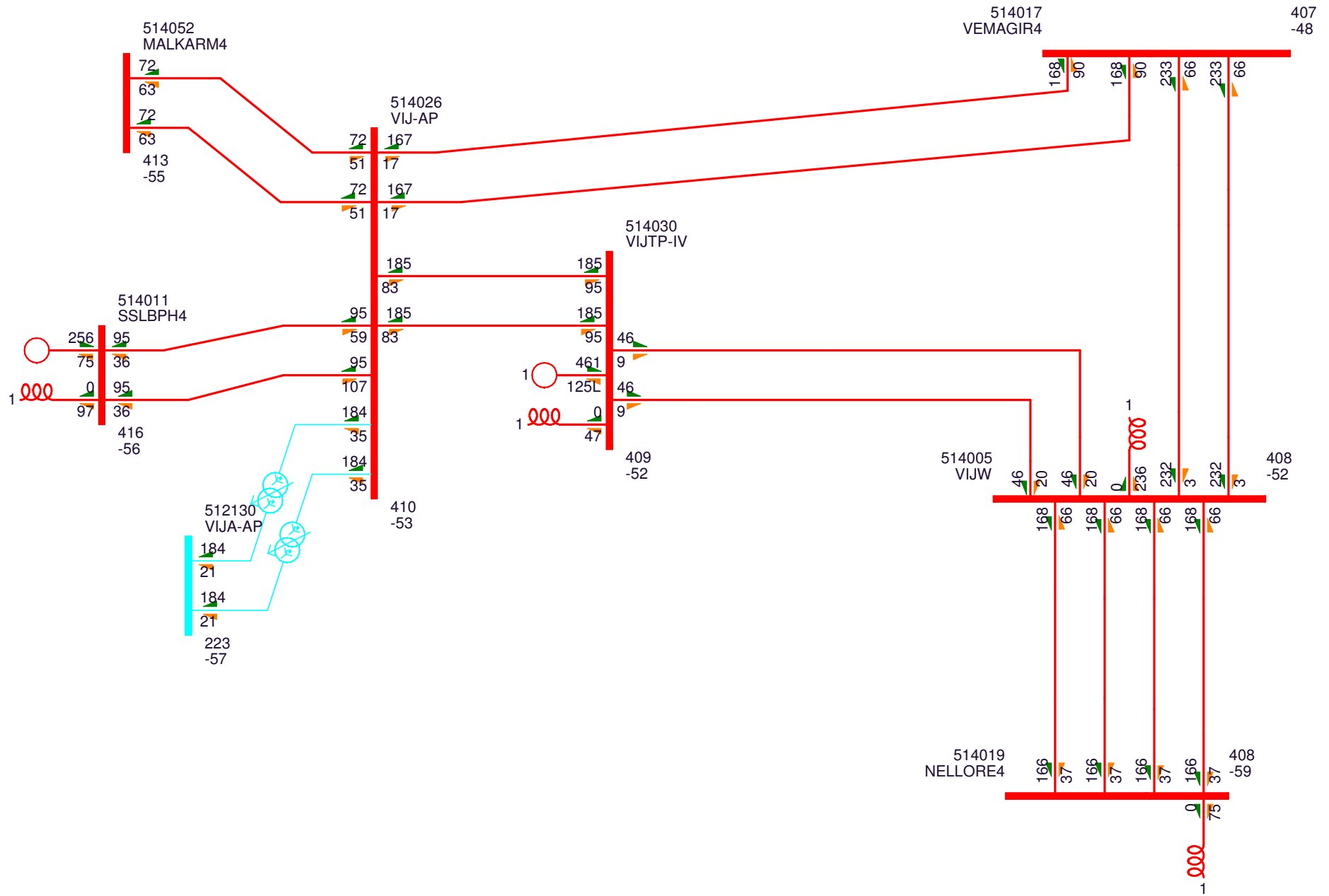
Yours faithfully,

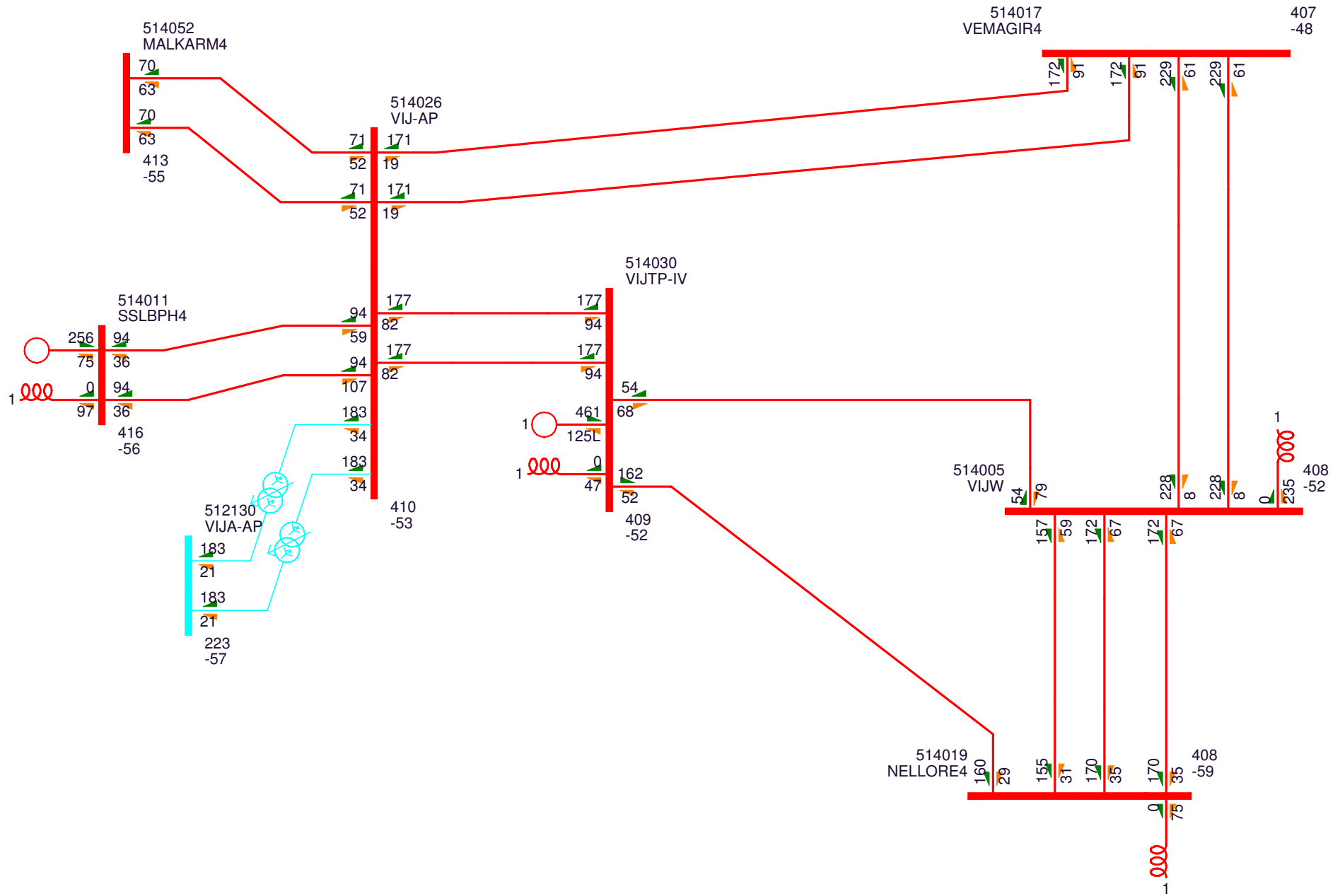
-sd/-  
(K. K. Arya)  
Chief Engineer(SP & PA)

Copy to:

The Director (Transmission),  
APTRANSCO, Vidyut Soudha,  
Hyderabad-500082







**TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED**

From:  
The Chief Engineer ( IPC& Power Systems),  
APTRANSCO,  
Vidyut Soudha,  
Hyderabad – 500 082

To  
The Chief Engineer (SP &PA),  
Central Electricity Authority,  
Seva Bhavan, R.K.Puram,  
NEW DELHI – 110 066

**Lr.No.CE(IPC&PS)/SE(PS)/DE(SS&LTSS)/F.VTS-NNA/ D.No.27/15 Dt. 16-02-15**

Sir,

Sub: APTRANSCO - Re –Orientation of Vijayawada – Nellore DC line –Reg

Ref: 1) CEA Letter No 51/4/38<sup>th</sup>/SP&PA-2015/202-203.dated 27-01-2015.

2) M/s PGCIL mail dt 4-2-2015.

\*\*\*

In the cited reference (1), the CEA seeks views of APTRANSCO/APGENCO regarding Re orientation of Vijayawada PG(Nunna) – Nellore 400kV DC line.

The power flows carried out by PGCIL, vide reference (2), and are examined.

In this context, a meeting was held on 04-02-2015 in the chambers of CMD/APTRANSCO, the C.O.O & other officials of PGCIL explained the following benefits:

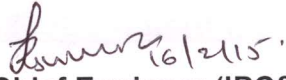
- The Losses will be reduced in SR Grid & AP Grid.
- The Timely completion of this line will be helpful for the Southern Region Grid and as well as for AP state also.

As desired by APGENCO, it is to informed that, the land required is to be acquired by PGCIL from APGENCO on payment as per market value.

Further, it is to inform that, for the successful commissioning of the reorientation of Vijayawada- Nellore 400kV DC line any short falls such as PIR for Breakers at Vijayawada TPS – IV end, PLCC equipment and any other civil structure works/short falls if required to be borne by PGCIL.

In view of all of the above, it is concluded that APTRANSCO & APGENCO are agreeable for the reorientation of Vijayawada- Nellore 400kV DC line and one 63 MVAR line reactor shifting to Vijayawada TPS –IV ( APGENCO switchyard ) end of Vijayawada TPS - IV – Nellore 400kV line, which can be implemented by M/s PGCIL.

Yours faithfully,

  
16/2/15  
**Chief Engineer (IPC& Power Systems)**

Copy to:

Sri Pardeep Jindal,  
Director (SP&PA)  
Central Electricity Authority,  
Seva Bhavan, R.K.Puram,  
NEW DELHI – 110 066

Mrs Seema Gupta ,  
COO (CTU – Plg)& CE,PGCIL,  
'Saudamini' Plot No.2 Sector-29,  
GURGAON – 122001, Haryana.

Copy submitted to  
The Director/Projects/APTRANSCO  
The Director/Grid, Transmission & Management/APTRANSCO  
The Director/Thermal/APGENCO  
The Chairman& Managing Director/APTRANSCO & MD/APGENCO